

Date: Thursday, 12/13/2007 2:38:53 PM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SADDLE FITTING, FWD (OUTBOARD/INBOARD)
Job Number	: 36322		
Estimate Number	: 10530		
P.O. Number	:	Part Number	: D2571
This Issue	: 12/13/2007 S.O. No. :	Drawing Number	: D2571 REV E
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 1 / Type : MACHINED PARTS	Drawing Revision	: E
Previous Run	: 35931	Material	:
Written By	:	Due Date	: 1/10/2008
Checked & Approved By	: <u>07.12.13</u>	Qty:	16 Um: Each
Comment	: Est: 1 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572 KJ		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	D6101007	7075-T7351 8.25X7.75X2.5
-----	----------	--------------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 16.0000 Each(s)  
 7075-T7351 8.25X7.75X2.5  
 Make from D6101-007 billet for D2571  
 Ensure that grain is along 7.75" length  
 Batch No: 034875

SF 08/01/14

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1  
 Program Batch No. 36322 Double check by: SG

- 1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets
- 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
- 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets
- 4-Deburr and remove all machining marks
- 5-Tumble to remove sharp edges.

PTO

DSP / SG / SF 08/01/14

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
-----	---------------	------------------------------



Comment: CONVENTIONAL MILLING MACHINE  
 Machine keyway as per dwg D2571 & D2572

SG / DSP 08/01/20

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SG / DSP 08/01/20

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2571 PAR #: 12/A Fault Category: Prod - macth NCR: Yes No DQA: 1 Date: 08.01.25  
 QA: N/C Closed: 1 Date: 08 01 28

NCR: <u>36322</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/01/14	2.0	Z origin was off by .125" . human error first time DAILY SADDLE set ups.	<u>[Signature]</u> 08/01/14	Scrap and Destroy and Replace Qty (X1) B# <u>34875</u>	<u>2.F</u> 08/01/14 <u>[Signature]</u>	<u>[Signature]</u> 08/01/14	<u>[Signature]</u> 08/01/14	<u>[Signature]</u> 08/01/14

NOTE: Date & initial all entries

Date: Thursday, 12/13/2007 2:38:53 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, FWD (OUTBOARD/INBOARD)

Job Number: 36322

Part Number: D2571

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SA 08/07/22

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

MS

08-01-22

16

7.0

POWDER COATING

POWDER COATING



M 106379



16X

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M-1

08/01/22

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

AS MS

08-01-23

16x

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST432

AS

08/01/24

16

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08 01 25

Job Completion



2008/11/24  
W

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	36322
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b>	D2571
<b>Inspection Dwg:</b> D2571 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443	DT8682	.441	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		7.997	8.000	8.000	8.000		
F	0.490	0.510		.497	.510	.508	.505		
G	0.257	0.262	DT8683	.258	.258	.258	.258		
H	0.375	0.380	DT8684	.376	.376	.376	.376		
I	0.490	0.510		.501	.505	.505	.505		
J	1.174	1.184		1.180	1.179	1.179	1.179		
K	0.558	0.578		.569	.562	.562	.562		
L	1.174	1.184		1.180	1.179	1.179	1.179		
M	1.490	1.500		1.500	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.876	3.874	3.874	3.874		
P	0.115	0.135		.124	.127	.127	.127		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.248	.248	.248	.248		
S	0.115	0.135		.135	.130	.130	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.961	2.960	2.960	2.960		
V	0.230	0.250		.240	.242	.242	.242		
W	0.115	0.135		.135	.122	.122	.122		
X	0.308	0.313		.312	.312	.312	.312		
Y	0.760	0.765		.764	.764	.764	.764		
Z	0.352	0.372		.367	.367	.367	.367		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.627	.635	.630	.630		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.250	.250		
AE	1.375	1.395		1.384	1.385	1.385	1.385		
AF	0.115	0.135		.128	.128	.128	.128		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.250	.252	.252	.252		
AI	2.000	2.020		2.000	2.001	2.001	2.001		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	RF 186
Date:	05/01/14

Audited by:	SD
Date:	08/10/12

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	36322
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b>	D2571
<b>Inspection Dwg:</b> D2571 Rev. E		Page 1 of 1

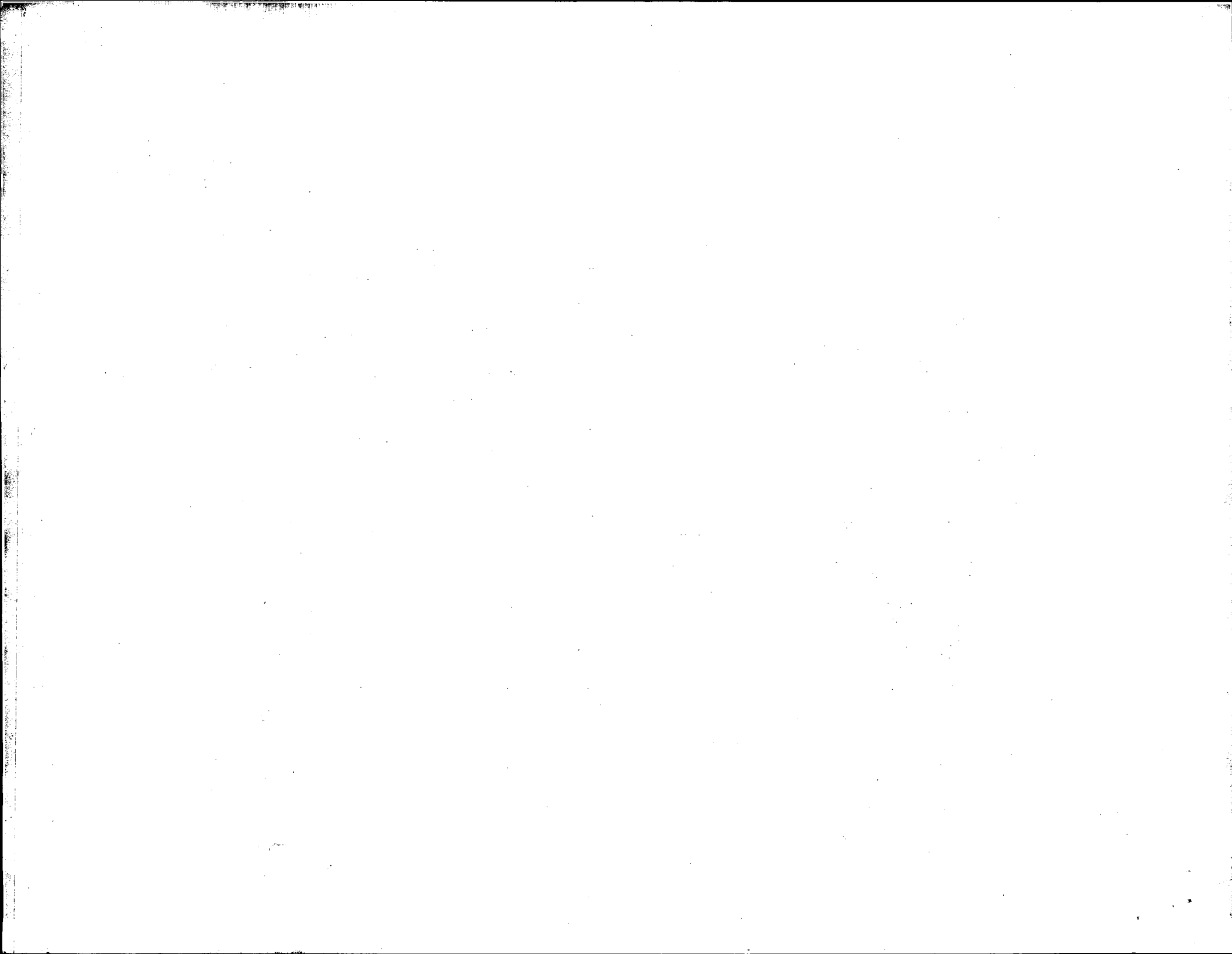
Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	5	6	7	8	By	Date
A	0.438	0.443	DT8682	.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.007	8.002		
F	0.490	0.510		.501	.501	.501	.501		
G	0.257	0.262	DT8683	.258	.258	.258	.258		
H	0.375	0.380	DT8684	.376	.376	.376	.376		
I	0.490	0.510		.500	.500	.503	.503		
J	1.174	1.184		1.180	1.180	1.180	1.180		
K	0.558	0.578		.568	.568	.568	.568		
L	1.174	1.184		1.180	1.180	1.180	1.180		
M	1.490	1.500		1.500	1.500	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.125	.125	.125	.125		
Q	0.115	0.135		.125	.125	.135	.135		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.125	.125	.128	.128		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.240	.240	.240	.240		
W	0.115	0.135		.128	.128	.126	.126		
X	0.308	0.313		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.360	.360	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.630	.630	.630	.630		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.250	.250		
AE	1.375	1.395		1.385	1.385	1.385	1.385		
AF	0.115	0.135		.125	.125	.125	.125		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.250	.250	.260	.260		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	RF
Date:	08/01/17

Audited by:	08/01/22
Date:	SD

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	



<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	36322
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b>	D2571
<b>Inspection Dwg:</b> D2571 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	91	102	118	124	By	Date
A	0.438	0.443	DT8682	.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.75	1.75		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.502	.502	.502	.502		
G	0.257	0.262	DT8683	.258	.258	.258	.258		
H	0.375	0.380	DT8684	.376	.376	.377	.377		
I	0.490	0.510		.505	.505	.503	.503		
J	1.174	1.184		1.180	1.180	1.180	1.180		
K	0.558	0.578		.570	.570	.570	.570		
L	1.174	1.184		1.180	1.180	1.180	1.180		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.125	.125	.126	.126		
Q	0.115	0.135		.135	.135	.135	.130		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.127	.127	.128	.128		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.962	2.962	2.963	2.963		
V	0.230	0.250		.238	.240	.243	.240		
W	0.115	0.135		.127	.127	.127	.127		
X	0.308	0.313		.310	.310	0.311	.311		
Y	0.760	0.765		.760	.760	0.760	0.760		
Z	0.352	0.372		.368	.364	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.630	.620	.628	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.250	.250		
AE	1.375	1.395		1.385	1.385	1.385	1.385		
AF	0.115	0.135		.125	.125	.128	.128		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.250	.250	.254	.254		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	S.F. / DSP
Date:	08/01/19

Audited by:	SD
Date:	08/01/20

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	



<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	36322
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b>	D2571
<b>Inspection Dwg:</b> D2571 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	13	14	15	16	By	Date
A	0.438	0.443	DT8682	.441	0.441	0.441	.441		
B	1.745	1.755		1.748	1.748	1.748	1.749		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.748	1.748	1.749		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		0.501	.501	0.501	0.499		
G	0.257	0.262	DT8683	.258	.260	0.260	.260		
H	0.375	0.380	DT8684	.376	0.377	0.377	.377		
I	0.490	0.510		.500	0.503	0.503	0.501		
J	1.174	1.184		1.180	1.180	1.1785	1.179		
K	0.558	0.578		0.568	0.568	0.568	0.568		
L	1.174	1.184		1.180	1.179	1.1785	1.179		
M	1.490	1.500		1.500	1.495	1.494	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.125	.125	0.126	0.128		
Q	0.115	0.135		.135	0.135	0.135	.135		
R	0.240	0.260		.250	0.247	0.247	0.247		
S	0.115	0.135		.130	0.130	0.130	.130		
T	0.178	0.198		.188	.188	.188	0.188		
U	2.940	2.980		2.962	2.960	2.960	2.960		
V	0.230	0.250		.240	.240	0.240	0.240		
W	0.115	0.135		.126	.126	0.126	0.126		
X	0.308	0.313		0.310	0.310	.310	0.310		
Y	0.760	0.765		.760	0.760	0.760	0.760		
Z	0.352	0.372		0.364	.364	0.364	0.364		
AA	0.470	0.530		.500	0.500	0.500	0.500		
AB	0.615	0.635		0.628	.628	0.628	0.628		
AC	0.053	0.073		.063	.063	0.063	.063		
AD	0.240	0.260		0.250	.250	0.250	.250		
AE	1.375	1.395		1.385	1.385	1.385	1.385		
AF	0.115	0.135		0.135	0.135	0.135	.135		
AG	0.240	0.280		.260	0.260	.260	.260		
AH	0.240	0.260		0.250	0.250	.250	.250		
AI	2.000	2.020		2.00	2.00	2.000	2.000		
AJ	0.023	0.043		0.033	.033	0.033	.033		
Accept/Reject									

Measured by:	S.F./DTP
Date:	08/01/18

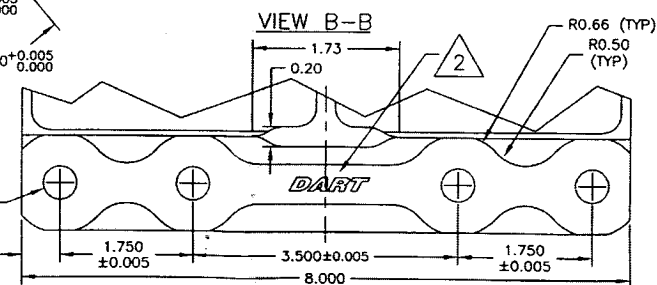
Audited by:	SA
Date:	08/01/22

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

05.12.06

MATERIAL: 7075-17351 (QQ-A-250/12) (REF DART SPEC. D6102-001)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART  
QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- $\triangle E$



E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES: TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN	DRAWN BY	NEW 1330E	
DS	PH	<b>DART</b>	DART AEROSPACE LTD. HAMMERSLEY, ONTARIO, CANADA
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D2571	REV.
DATE 05.07.13		TITLE OUTER FWD SADDLE	SHEET 1 OF 2

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL  
AND IS SUPPLIED ON THE EXPRESS CONDITION  
THAT IT IS NOT TO BE USED FOR ANY PURPOSE  
OR COPIED OR COMMUNICATED TO ANY OTHER  
PERSON WITHOUT WRITTEN PERMISSION FROM  
DART AEROSPACE LTD.

DETAIL C  
SCALE 4:3

SECTION  
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 36322